

REGARDING TOPIRAMATE FOR ALCOHOL DEPENDENCE

DEAR EDITOR:

The article by Drs. Pettinati and Rabinowitz titled, "New pharmacotherapies for treating the neurobiology of alcohol and drug addiction," [*Psychiatry* 2006;3(5):14–16] was quite informative and interesting. The authors mentioned the role of topiramate in treating cocaine addiction and also mentioned the ongoing study by Kampman and colleagues on the treatment of patients with co-occurring cocaine and alcohol dependence. The efficacy of topiramate in treating patients with alcohol dependence, however, was not stressed, and there have been studies showing its effectiveness in treating this population.

A study by Johnson, et al., showed that topiramate (up to 300mg/day) was significantly more effective than placebo at improving drinking outcomes. The study was a double-blind, randomized, controlled 12-week clinical trial comparing oral topiramate and placebo for treatment of 150 alcohol-dependent individuals. Seventy-five of these individuals received topiramate (25–300mg) and the other 75 received placebo as an adjunct to weekly standardized medication adherence management. Participants on topiramate compared to those on placebo had fewer drinks per day, fewer drinks per drinking days, and fewer heavy drinking days.¹

Laviolette, et al.,² and Shank, et al.,³ postulated in their studies that a switch from a nonaddicted dopamine-independent reward transmission to an addicted dopamine-dependent transmission appears to be controlled by carbonic anhydrase, which is also

inhibited by topiramate, hence this might be another pathway of its effectiveness in addiction treatment.

An interesting study by Zullino, et al., also indicated that topiramate has promising efficacy in opiate detoxification. In this study, topiramate was compared to clonidine and carbamazepine/mianserin as detoxification agents. The topiramate scheme began with high doses that were then decreased. The patients in the topiramate group required less analgesic and myorelaxant comedications during detoxification.⁴

Another study by Johnson, et al., which compared topiramate versus placebo as a treatment for promoting smoking abstinence among alcohol-dependent smokers, showed that topiramate recipients were significantly more likely than placebo recipients to abstain from smoking. They concluded that topiramate (up to 300mg/day) showed potential as a safe and promising medication for promoting smoking abstinence in alcohol-dependent individuals.⁵

With regards,

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